SOFTEC - AN INTRODUCTION

SOFTEC is a magnificent annual event organized at FAST-NU Lahore Campus, with the primary aim of promoting the advancement of Information Technology and the propagation of its benefits amongst all. For the past 25 years this I.T. extravaganza has enriched the awareness amongst students and professionals alike, providing a forum for the exchange of ideas, an environment for the showcase of exceptional professional skill and a platform for innovation.

The event has become an annual feature at FAST-NU and each year SOFTEC grows bigger and attracts a larger number of participants. The annual SOFTEC event is now the most anticipated, the most promoted and the most participated-in event held in the FAST-NU. It has deeply entwined its roots in the culture of the university and has become a highly esteemed tradition.

SOFTEC SOCIETY

SOFTEC Society, the organizing body of the annual SOFTEC event, is the largest student society of FAST-NU. Its inspired establishment by a group of students of the FAST-NU Lahore campus transpired in 1995. These gifted students understood the potential of I.T. to act as an instrument of change and betterment for a country sadly trailing in this lucrative field. Thanks to their vision, students from all over the country now come to share and exhibit their ideas in the 2-day I.T. extravaganza of SOFTEC.

In 2005, SOFTEC achieved a monumental feat by organizing an All ASIA event. SOFTEC 2006 managed to glean even more regional participation, bringing in participants from as far away as Nepal. SOFTEC 2007, yet again provided a platform for students all over Asia, including students from the Middle Eastern countries such as Iran to come together and prove their technological worth. SOFTEC 2019 was even more successful than the preceding events which encouraged productivity as well as the student networking. Now SOFTEC 2022 will, undoubtedly, attract even more participation after the continuous success of the previous events.

Having established SOFTEC regionally as an I.T. event of exceptional standing, appealing to people of all age-groups and breaking a barrier of 1,500 participants in any event organized by the students of Pakistan, SOFTEC 2022 will attempt to expand its activities to focus on aspects of I.T. This is just another step towards involving people of varied interests in this edifying event.

APPENDIX A: GENERAL INFORMATION FOR PARTICIPANTS

This document provides participants with general information regarding registration procedures and deadlines. Full rules and regulations should be downloaded from http://www.softecnu.org.

The following competitions will take place in **SOFTEC 2022**:

- **♦** Software Project Competition
- **♦** Engineering Project Competition
- **♦** Programming Competition
- **♦** Web Development Competition
- **♦** App Development Competition
- **♦** Robo Rumble
- **♦** Graphic Designing Competition
- Gaming Competition
- **♦** Ideas Xtreme
- **♦** Artificial Intelligence Competition

In addition to this, the event will also consist of following exhibitions:

- **♦** Software House Enclosure
- **♦** Software Project Exhibition
- **♦** Engineering Project Exhibition

People desirous of taking part in SOFTEC 2022 competitions must register for each competition separately. Individuals who pledge to compete in more than one competition are responsible for ensuring that they are able to give ample time to each competition, and that at least one other member of their team can represent them in each competition (especially for Software/Engineering Project Competition).

Registration is conducted through the SOFTEC website: http://www.softecnu.org. The website also provides detailed information regarding each competition's eligibility criteria, registration fees, rules and regulations, number of teams per institute, etc.All competitions are open to *eligible candidates* (those fulfilling all other competition requirements) within Pakistan.

Once registered, a candidate will receive confirmation of participation from SOFTEC



Society (website update).

All competitions have a registration fee, which must be paid at the earliest upon receipt of confirmation of participation. The payment may be made via (bank draft, branchless banking money transfer and cash i.e. by hand). For specific deadlines for each competition, please see the website.

APPENDIX B: COMPETITIONS

SOFTWARE PROJECT COMPETITION

The Software Project Competition was the very first event included in the roster of SOFTEC, in its advent in 1995. It has become the core around which the entire SOFTEC event is now arranged. This competition brings together students from across the world to display their software projects for formal judging by a team of experts, providing participants with valuable feedback and experience of real-world evaluation benchmarks. Not only is this a source of erudition for the participants, but visitors to the exhibition are more often than not students seeking projects with the potential for future development, or even I.T. industry professionals looking for promising talent among the participants.

ELIGIBILITY

In order for a person to participate in this category, he/she must be enrolled in an undergraduate degree program.

If a software entry is being made by a group, each member of that group must fulfil the eligibility criteria for the category in question. There can be **four members** in a team at most.

In each separate category, the participants' software projects will be filtered through three rigorous rounds of analysis by the judges. Apart from the competition itself, the participants also get a chance to display their software projects for the general public throughout the event.

The prizes for this Competition will be distributed as follows:

| Winner Prize | PKR 100,000 |
|---------------------------------|-------------|
| 1 st Runner-Up Prize | PKR 50,000 |
| 2 nd Runner-Up Prize | PKR 25,000 |

ENGINEERING PROJECT COMPETITION

For too long the hardware engineering aspects of I.T. work in Pakistan had been merely an afterthought in professional competitions. With the intentions of changing this attitude, the Engineering Project Competition, a highly anticipated event was launched for the first time during SOFTEC 2007.



The exceedingly ambitious hardware-based projects submitted to the software project competition in recent years, as well as our institute's steps into the hardware engineering education arena prompted us to initiate this competition exclusively for engineering projects of undergraduate students. The evaluation of entries will follow the same pattern as that of the software project competition, with participants' entries undergoing three rounds of analysis by a panel of expert judges.

ELIGIBILITY

In order for a person to participate in this category, he/she must be enrolled in an undergraduate degree program or has completed his/her undergraduate studies on or after January 1, 2022.

If a project entry is being made by a group, each member of that group must fulfil the eligibility criteria for the category in question. There can be **four members** in a team at most.

In each separate category, the participants' engineering projects will be filtered through three rigorous rounds of analysis by the judges. Apart from the competition itself, the participants also get a chance to display their projects for the general public throughout the event.

The prizes for this competition are delineated below.

| Winner Prize | PKR 80,000 |
|-----------------|------------|
| Runner-Up Prize | PKR 40,000 |

PROGRAMMING COMPETITION

The Programming Competition is a challenging arena, attracting bright and sharp minds from all over Asia. Programming under timed conditions tests the skills and grit of the participants involved to the limit. SOFTEC 2022 will provide local participants the opportunity to match their skills with a much wider field of competitors than otherwise available. The international event will gear the participants to perform under pressure and give them an insight as to where they stand in comparison with their counterparts from countries throughout the world. The competition is structured to test participants in the arena of speed programming – coming up with a solution to a complex question in limited time.

The Programming Competition has traditionally been the most crucial and electrifying event at SOFTEC, mainly due to its highly competitive and challenging nature, as well as the extraordinary skills shown each year by a diverse pool of talented programmers. It is a

unique opportunity for students to match wits with the very best and brightest minds from across the region.

ELIGIBILITY

There can be **three members** in a team at most. Each member of the team must be an undergraduate student, i.e. enrolled in an undergraduate degree program at the time of the competition. The distribution of prizes for this competition is as follows:

| Winner Price | PKR. 80,000 |
|---------------------------------|-------------|
| 1st Runner-Up Prize | PKR. 40,000 |
| 2 nd Runner-Up Prize | PKR. 25,000 |

ARTIFICIAL INTELLIGENCE COMPETITION

Artificial Intelligence Competition was named as Data Science Competition when it was launched for the first time as a highly anticipated event during SOFTEC 2019. It is a competition in which contenders compete against each other using their programming and analytical skills. In this competition, participants are required to train a model from a provided dataset and problem statement. Many tech savvy AI specialists will get a chance to showcase their talent at the biggest I.T event of the country and this competition can and will attract viewers in large numbers.

ELIGIBILITY

Each member of the team must either be an undergraduate or graduate student, i.e. enrolled in an undergraduate degree program at the time of the competition.

There can be **three members** in a team at most. The prizes for this Competition will be distributed as follows:

| Winner Price | PKR 50,000 |
|-----------------|------------|
| Runner-Up Prize | PKR 25,000 |

WEB DEVELOPMENT COMPETITION

In 2014, SOFTEC introduced a Web development Competition which is more challenging than any other. Different teams from renowned institutes participate to test their web development skills against a broader and tougher spectrum of students and get to know the most recent developments in the field by the experts. Competing with the tough and challenging opponents will not only provide you a fruitful experience but will also help you to analyze in depth your weaknesses and strengths, helping you out later in your career. So, if you don't want to miss the thrill, sign up and experience the stimulating atmosphere.

ELIGIBILITY

Each member of the team must be an undergraduate student, i.e. enrolled in an undergraduate degree program at the time of the competition.

There can be **three members** in a team at most.

The prizes for this Competition will be distributed as follows:

| Winner Prize | PKR 80,000 |
|-----------------|------------|
| Runner-Up Prize | PKR 40,000 |

ROBO RUMBLE COMPETITION

Get ready to witness the rise of machines and be enthralled by the steel against steel as SOFTEC introduces the cyber matchups which will see robots take on robots in Robo Rumble. This competition provides an innovative opportunity for tech and hardware lovers to give identity and life to their creations and translates a passion of morphing into reality. We will provide the Coliseum; we will provide the cheering mad crowd and the tech wizards will provide the machines.

ELIGIBILITY

There can be **four members** in a team at most. Each member of the team must be an undergraduate student, i.e. enrolled in an undergraduate degree program at the time of the competition. The distribution of prizes for this event is as follows:

| Winner Prize | PKR 40,000 |
|-----------------|------------|
| Runner-Up Prize | PKR 20,000 |

GRAPHIC DESIGNING COMPETITION

In 2015, SOFTEC introduced Graphic Designing Competition to test the skills and creativity from all over Pakistan as well as the world. Graphic designing has become the main attraction for most companies, as they are eager to find new talent in the field. SOFTEC now provides a platform where students can demonstrate their ideas and even get a chance to join companies on a permanent basis.

The international event will gear the participants to perform under pressure and give them an insight as to where they stand in comparison with their counterparts from countries throughout the world. Competing with the tough and challenging opponents will not only provide you a fruitful experience but will also help you to analyze in depth, your weaknesses and strengths, helping you out later in your career. So, if you do not want to miss the thrill, sign up and experience the stimulating atmosphere.

ELIGIBILITY

Each member of the team must be an undergraduate student, i.e. enrolled in an undergraduate degree program at the time of the competition. There can be **two members** in a team at most.

| Winner Prize | PKR 40,000 |
|-----------------|------------|
| Runner-Up Prize | PKR 20,000 |

GAMING COMPETITION

The profession of gaming is rapidly gaining ground in Pakistan. No longer is the activity relegated to the fringes of the I.T. industry; it is now recognized as a lucrative career choice in its own right.

The founders of this envisioned platform, where gamers from throughout the country could come together to compete professionally in this demanding sport realized this vision with the first Gaming Competition in SOFTEC 2005, which featured competitions in such popular multiplayer games as Counter Strike, Call of Duty and War Craft. The event was a resounding success, proving to be Pakistan's biggest ever gamers gathering with more than 56 Teams and over 256 Participants.

The gaming competition also draws intense interest from spectators. Spectator arenas are set up to allow people to watch the progress of tournaments. The palpable excitement around these arenas attracts multitudes of curious visitors besides those coming specifically to watch, making the gaming competition one of the most eagerly followed competitions of SOFTEC.

ELIGIBILITY

In order for a participant to make an entry in this competition, he/she must be at least 13 years of age & should be a registered student of Grade 8 – Undergraduate studies at the time of the competition.

In 2022, we hope to bring together people from across the world to compete for in the following:

| FIFA 20 (1 vs. 1) | |
|-----------------------|------------|
| 1 st Prize | PKR 10,000 |

| TEKKEN | 7 (1 vs. 1) |
|-----------------------|-------------|
| 1 st Prize | PKR 10,000 |

| Valorant (5 vs. 5) | |
|--------------------|------------|
| Winner Prize | PKR 40,000 |
| Runner-Up Prize | PKR 20,000 |

APP DEVELOPMENT COMPETITION

One of the latest and most worked upon areas in IT is App Development. So, catering to the latest needs and the trends of the modern world, SOFTEC decided to introduce a new 24-hour competition last year during SOFTEC 2017, for app development. In this competition each team is given a theme or general problem, they have to implement their ideas to solve that problem with Application, and the participants can choose their platform Android or IOS. The theme/task is told to all the participants 30 minutes before the competition starts. Each team must bring their own laptops. No participant would be allowed to go outside the university premises during the competition.

ELIGIBILITY

Each member of the team must be an undergraduate student, i.e. enrolled in an undergraduate degree program at the time of the competition.

There can be **three members** in a team at most. The prizes for this Competition will be distributed as follows:

| Winner Prize | PKR 50,000 |
|-----------------|------------|
| Runner-Up Prize | PKR 25,000 |

IDEAS XTREME COMPETITION

Ideas Xtreme is a competition in which candidates can present their idea based on a specific theme decided by our team, through presentation using any presentation software rather than a model. Given their Idea must be practical and related to science/technology and participants must be able to relate their idea to benefits for people and or the change it could bring for the people, in short application of idea must be presented after the presentation of ideas.

We witness an increased participation every year, and the SOFTEC Ideas Xtreme 2019 entertained over a hundred teams.

ELIGIBILITY

The categories of participation, as well as the prizes for Ideas Xtreme for SOFTEC 2022 are as follows:

| Senior Wing (Grade 9- A levels/ Intermediate) | |
|---|-------------|
| Winner Prize | PKR. 20,000 |
| Runner-Up Prize | PKR. 15,000 |

| Junior Wing (Grade 4- Grade 8) | |
|--------------------------------|-------------|
| Winner Prize | PKR. 20,000 |
| Runner-Up Prize | PKR. 15,000 |

REGISTRATION FEE FOR PARTICIPATION IN SOFTEC 2022

Registration fee for each competition is mentioned as follows. The fee must be paid at the earliest upon receipt of confirmation of participation.

Registration fee may be in the form of a bank draft (excluding bank charges) in favor of **BCCI-FAST** which would be payable in any Lahore-based bank. This bank draft can be submitted either by post or by hand.

Payment can be submitted in cash by hand in the SOFTEC Office at FAST-NU Lahore.

| <u>Competition</u> | REGISTRATION |
|--|--------------|
| Software Project Competition | PKR 2,500 |
| Programming Competition | PKR 2,500 |
| Engineering Project Competition | PKR 2,500 |
| Artificial Intelligence Competition | PKR 2,500 |
| Web Development Competition | PKR 2,500 |
| App Development Competition | PKR 2,500 |
| Robo Rumble Competition | PKR 2,500 |
| Graphic Designing Competition | PKR 1,500 |
| Gaming Competition FIFA 20 | PKR 750 |
| Gaming Competition TEKKEN 7 | PKR 750 |
| Gaming Competition Valorant | PKR 2,500 |
| Ideas Xtreme (Senior Wing) | 1,000 |
| Ideas Xtreme (Junior Wing) | 1,000 |

SOFTEC 2022 FAST NUCES

Accommodation Details:

- a) PKR 1250 per participant and ambassador.
- b) Dinner on Friday, Saturday and Sunday night 25th, 26th and 27th March 2022.
- c) Breakfast on both event days 26th and 27th March 2022.
- d) Friday and Saturday night stay.
- e) PKR 2500 will be charged for the accommodation of faculty members